

INDOOR AIR QUALITY PRELIMINARY REASSESSMENT

**Massachusetts Department of Mental Health
Site Office Region II
40 Institute Road
Grafton, Massachusetts**



Prepared by:
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Bureau of Environmental Health Assessment
May, 2001

Background/Introduction

At the request of Bill Corliss, Massachusetts Department of Mental Health (MDMH), a preliminary indoor air quality reassessment was done at the MDMH Site Office, Region II (the site office), 40 Institute Road, Grafton, Massachusetts. This preliminary reassessment was conducted by the Massachusetts Department of Public Health (DPH), Bureau of Environmental Health Assessment (BEHA). Employees were moved from the building because of odors from a large rodent die-off within the building. The purpose of this assessment was to determine whether odors had improved several weeks after employees were removed from the building. On February 26, 2001, Michael Feeney, Chief of Emergency Response/Indoor Air Quality (ER/IAQ), made a visit to this building.

The site office is a two-story, wood frame building on the grounds of the former Grafton State Hospital. The building appears to have been built originally as patient housing; the date of construction is estimated to be prior to 1940. After Grafton State Hospital was closed, the building was designated as excess state property and remained vacant for several years. The site office moved into the building in 1988. Reportedly, maintenance of the grounds is currently administered by the Department of Social Services.

The floor space was originally configured into four open wards with private patient rooms and nurse's stations. Three of the four open wards are subdivided into work areas by floor dividers that are five feet high. Each private patient room or nurse's station was converted into private offices. The first floor north section was divided into a waiting room, conference room, kitchen and shared office space. Windows are openable in some areas of the building. Prior to occupancy by the site office, the interior of the building was renovated. Two air handling units (AHUs) were installed at ground level at the front of the building. Suspended ceilings were

installed on both floors, possibly as a measure to reduce volume of the office space. The existence of a thick layer of fiberglass insulation on top of the suspended ceiling on the second floor indicates that the renovation was an energy conservation measure. Heat is supplied by a steam plant, which is located in a separate building.

Methods

Air tests for carbon monoxide were taken with the TSI, Q-Trak, IAQ Monitor, Model 8551.

Results

These offices have an employee population of 28 with approximately one to two members of the general public visiting the space daily. Tests were taken under normal operating conditions. Test results appear in Table 1.

Discussion

A walkthrough of all sections of the building found no lingering odors related to rodent carcasses. Several improvements to the building have been made or were in the process of being completed during this preliminary reassessment.

1. The heating system of the building was disconnected from the campus steam plant and a furnace was installed. The furnace was functioning normally, with no detectable levels of carbon monoxide measured in the building.
2. Carpeting was removed on the first floor. Carpet reinstallation was being conducted during this preliminary reassessment.

3. New humidifiers were installed in the ventilation system.
4. Missing ceiling tiles were replaced.
5. Improvements to the return ventilation system were reportedly planned.
6. Work on the AHUs was reportedly planned.

Conclusions/Recommendations

A number of remedial steps have been completed and further remediation is planned for the building. In addition, residual odors from rodent carcasses appear to have ceased. It is recommended that remedial steps continue in accordance with previous BEHA recommendations. Upon notification and request BEHA staff will conduct a full reevaluation once renovations are completed and staff reoccupies the building.